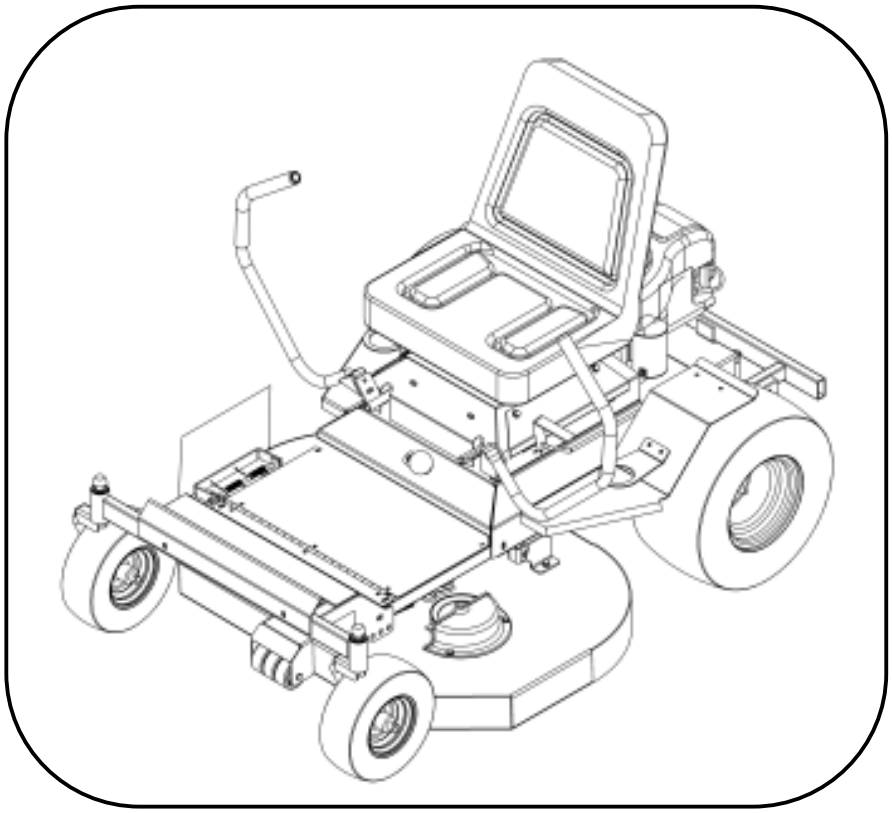
swisherinc.com

OWNER'S MANUAL

MODEL NO.
ZT1436
ZT17542B
ZT1842
ZT20050

IMPORTANT
Read and follow all Safety Precautions and Instructions before operating this equipment.

Rev.02.19.2003



"Z" SERIES
ZERO TURN HYDROSTATIC DRIVE

Assembly
Operation
Service and Adjustment
Repair Parts

1602 CORPORATE DRIVE, P.O. BOX 67, WARRENSBURG, MISSOURI 64093
PHONE 660-747-8183 FAX 660-747-8650

Manufacturing quality lawn care equipment since 1945

Made In The USA

ONZTR03

LIMITED WARRANTY

The manufacturer's warranty to the original consumer purchaser is: This product is free from defects in materials and workmanship for a period of two (2) years from the date of purchase by the original consumer purchaser. We will repair or replace, at our discretion, parts found to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

1) Engine Warranty	All engines utilized on our products have a separate warranty extended to them by the individual engine manufacturer. Any engine service difficulty is the responsibility of the engine manufacturer and in no way is Swisher Mower Co., Inc. or its agents responsible for the engine warranty. The Briggs & Stratton Engine Service Hot-Line is 1-800-233-3723. The Tecumseh Engine Service Hot-Line is 1-800-558-5402.
2) Commercial Use	This product is not intended for commercial use and carries no commercial warranty.
3) Limitation	This warranty applies only to products which have been properly assembled, adjusted, and operated in accordance with the instructions contained within this manual. This warranty does not apply to any product of Swisher Mower Co., Inc., that has been subject to alteration, misuse, abuse, improper assembly or installation, shipping damage, or to normal wear of the product.
4) Exclusions	Excluded from this warranty are normal wear, normal adjustments, and normal maintenance.

In the event you have a claim under this warranty, you must return the product to an authorized service dealer. All transportation charges, damage, or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 1-800-222-8183. The model number, serial number, date of purchase, and the name of the authorized Swisher dealer from whom you purchased the mower will be needed before any warranty claim can be processed.

THIS WARRANTY DOES NOT APPLY TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR ALL EXPRESSED WARRANTIES. Some states do not allow the limitation of consequential damages or limitations on how long an implied warranty may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state-to-state. This is a limited warranty as defined by the Magnuson-Moss Act of 1975.

TABLE OF CONTENTS

WARRANTY……...….2
INTRODUCTION……..3
SAFETY……4-7
OPERATION……8-10
MAINTENANCE…….11-12
SERVICE / ADJUSTMENT……..…13-16
PARTS BREAKDOWN……...17-21
TROUBLESHOOTING……..22

Thank you for choosing Swisher's ZTR Mower. Before operating your mower, please read, understand and follow all of the safety precautions and other instructions explained in this manual . As with all power equipment, lawnmowers can be potentially dangerous if improperly used.

SAFETY PRECAUTIONS & DECALS

This Safety Alert Symbol indicates important messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury.

Read this manual completely. This machine can amputate hands and feet, and throw objects. Failure to observe the following safety instructions could result in serious injury or death.

- Read the manual. Learn to operate this machine safely.

- Always disconnect the spark plug wire and place the wire where it cannot contact the spark plug, to prevent accidental starting the engine when setting up, transporting, adjusting or making repairs.

- Keep all shields and guards in place.

- Understand the speed, steering and stability of this machine. Know the positions and operations of all controls before you operate this machine. Check all of the controls in a safe area before starting to work with this machine.

- Allow only responsible adults who are familiar with these instructions to operate this machine. **Never allow children to operate this machine.**

- Clear the area of objects such as rocks, toys, wire, etc. that can be picked up and thrown by the blade.

- Be sure the area is clear of other people before mowing. Be aware of the mower discharge direction and do not point at anyone. **Stop the machine** if anyone enters the mowing area. Children are often attracted to the machine and the mowing activity. ***Never assume that children will remain where you last saw them***. Keep children under the watchful care of another responsible adult.

- **No riders!**

- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.

- Do not mow in reverse. **Always look down and behind before and during backing**.

SAFETY PRECAUTIONS & DECALS

The operation of any cutter can encounter foreign objects to be thrown into the eyes, resulting in severe eye damage. Always wear certified safety glasses or wide-vision safety goggles for over spectacles before staring any cutting machine and while operating such a machine.

The operation of any cutter produces sound waves that are damaging to the human ear. Ear protection is recommended.

CAUTION!
Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. ***Never assume that children will remain where you last saw them.***

SLOPE OPERATION!
Do not operate on slopes greater than 15 degrees.
Use extra caution when mowing on slopes. Operate self-propelled units up and down slopes. There is a significant risk of overturns when operating across slopes. If you feel uneasy on a slope then **do not** mow it.

- Turn off the blades when not mowing. Before leaving the machine, turn off the blades and stop the engine.
- Watch for traffic when operating near or crossing roadways.
- Do not operate the mower if it has been dropped or damaged in any manner or if the mower vibrates excessively. Excessive vibration is an indication of damage. Repair mower as necessary.
- Dress properly. Do not operate the mower when barefoot or wearing open sandals. Wear only solid shoes with good traction when mowing.
- Never allow operation by untrained persons.
- Do not operate the machine while under the influence of alcohol or drugs.
- Operate self-propelled machines up and down slopes. There is significant risk of overturns when operating across slopes. Avoid sudden turns. Operate walk-behind machines across slopes. There is a significant risk of slipping under a walk-behind machine when operating up and down slopes.
- Never tamper with safety devices. Check their proper operation regularly.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting. Never make adjustments or repairs with the engine running. Mower blades are sharp and can cut. Wrap the blades or wear gloves, and use extra caution when servicing them. Do not operate at too fast a rate.
- Do not mow close to ditches, embankments or drop-offs. An edge could collapse. A mower wheel over the edge could suddenly turn the unit over.
- Do not mow on wet grass if possible. Wet grass causes reduced traction and could cause sliding. Do not park on a slope unless absolutely necessary.
- Always chock or block wheels and set parking brake if parked on slope.

SAFETY PRECAUTIONS & DECALS

WARNING: Hydraulic fluid can cause severe burns and penetrate skin causing severe injury or death.

- Do not step on mower deck when operating, dismounting or mounting the mower.

- Never push or pull unit with another vehicle. Transmission damage will occur.

- When transporting be sure to secure mower frame to transport vehicle. NEVER tie down to moving parts or linkages which may become damaged or come loose.

- NEVER transport mower while engine is running.

- NEVER add fuel or remove gas cap while engine is running or hot.

- NEVER store unit near an open flame such as a water heater or furnace.

- NEVER modify or allow anyone to modify or alter any components or safety devices.

- ALWAYS keep mower clean and free of debris and grass clippings.

- NEVER reverse battery cables. Electric shock will occur.

- ALWAYS keep battery away from open flame and sparks. Explosive gases from battery can cause serious injury or death.

- ALWAYS wear safety glasses and protective gear when servicing battery. Battery fluid contains sulfuric acid. Contact with battery acid on skin or clothing can cause severe chemical burns.

- NEVER tip battery beyond a 45 degree angle in any direction.

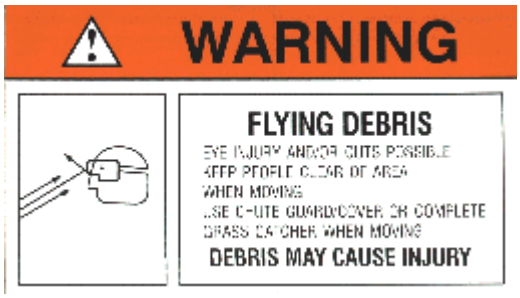
SAFETY PRECAUTIONS & DECALS

Danger/Warning Decal – OD99155

Ignition/PTO/Throttle Decal – OD99154

Ignition/PTO/Throttle Decal 50” Mower Only – OD99157

Parking Brake Decal – OD99152



Flying Debris Decal – OD53

Triangle Danger Decal – OD55

No Step Decal – OD11

DECALS NOT SHOWN

36” Decal – OD108 & OD112

42” Decal (17.5 HP Engine) – OD109 & OD113

(18 HP Engine) – OD110 & OD114

50” Decal – OD111 & OD115

Height Indicator Decal - OD99151

Swisher Flag USA Decal – OD39

Height of Cut Decal - OD99153

OPERATING YOUR NEW ZTR MOWER (cont.)

CONTROLS

- **OPERATOR PRESENCE SYSTEM**: This mower is equipped with an operator's presence system. Any attempt to leave the seated position with the engine running, without first disengaging the PTO switch and placing the steering levers in the neutral position, will cause the engine to shut off.

WARNING: Do not operate the machine unless the **Operator's Presence System** is functioning as described.

- **PARKING BRAKE:** Always set the parking brake before starting. The parking brake is located on the drivers left hand side. Engage the parking brake by pushing the lever rearward and down until lever locks into position. Be sure to release parking brake before operating the machine.

- **IGNITION:** The ignition switch is located on the drivers right hand side toward the rear of the seat. The ignition switch has three positions: OFF, ON, START.

- **THROTTLE:** The throttle\choke control is located on the drivers right hand side towards the front of the seat. For maximum performance and battery charging, operate mower at full throttle. When starting a cold engine, place lever forward in the full choke position. After start up, move throttle rearward to full throttle position. Move lever all the way to the rear for lowest setting before shutting off engine. The 50" Model has a choke mounted on the right side fender for easier cold weather starts.

- **PTO SWITCH:** The PTO, or Power Take Off switch is used to engage the blades of the mower. When the PTO switch is pulled out the blades will be engaged. When the PTO switch is pushed in the blades will be disengaged. The PTO switch must be pushed in to complete the Operator's Presence System to start engine.

- **NEUTRAL LOCK**: The steering levers must be in the **outward and locked** position for the mower to start. (See page 12)

STARTING MOWER

- **TO START:** Position steering handles outward to neutral locked position. Engage parking brake. Extend throttle to full choke position*. Start ignition and slide throttle lever back to full throttle position. Allow engine to warm up for 1 minute. Release parking brake
- * Model ZT20050 has a remote choke assembly located on the right fender, behind the rider.

- **FORWARD MOVEMENT:** To move the mower forward gently push both steering levers forward equal distance from the neutral position. The further you move the levers forward the faster you will travel**.** **CAUTION** steering levers have quick response timing**.**

- **BACKWARD MOVEMENT:** To move the mower backwards, gently pull back on the steering levers the same distance from neutral. The further you pull back the faster you will travel. **NOTE** it is normal for the reverse speed to be less than the forward for easier turning.

- **TURNS:** For left turn, move the right lever farther forward then the left. For right turn, move the left lever farther forward than the right. To obtain a tight turning radius, **GENTLY** reverse one lever and push the other lever forward. **CAUTION:** Aggressive turns can damage lawns. Do not make turns with the inside wheel stopped. It it better to keep both wheels turning slightly.

- **DECK HEIGHT ADJUSTMENT:** To raise the mower deck up and down, simply rotate the lever located in front of the seat above the floor plate. Clockwise raises the deck. Counterclockwise lowers the deck. The deck is adjustable from 1 ½" to 3 ½".

- For best performance, grass over 6 ½" in height should be mowed once in the highest position and once again at desired cut height.

- **ENGAGING BLADES:** Operator must be seated for operation of blades. With engine to full throttle position, pull UP on PTO switch located between the throttle and the key switch. To disengage blades, push DOWN on PTO switch.

- **STOPPING ENGINE:** Place both levers in the outward neutral locked position. Push PTO switch in to disengage. Place throttle lever to lowest setting and let idle for 30 seconds. Turn off ignition key and engage parking brake.

OPERATING YOUR NEW ZTR MOWER (cont.)

MOWING

WARNING: Do not operate mower at too fast of a rate. Sudden movements forward and backward at fast speeds can cause accidents resulting in personal injury

- Start out slowly moving steering levers SLOWLY forward and backward until you learn to operate the unit. NOTE: This mower has been designed to be very maneuverable. Practice in open, flat areas is extremely necessary to become comfortable and efficient with the controls.

- **BEGIN TO MOW:** Before starting the engine, set the desired deck height.

- Start the mower engine.

- Position the throttle lever about halfway and engage PTO switch. Reposition throttle lever to full throttle position.

- Move steering levers forward to begin mowing.

CAUTION: Always make sure the deck is not plugged with grass or other debris. Failure to do this will cause damage to the PTO belt.

- **STOPPING:** Hydrostatic mowers use hydrostatic braking through the transmissions. To slow or stop the unit move the steering levers to the neutral position

- **STOPPING THE ENGINE:** Move the throttle lever to slow position, allow engine to idle for 30 seconds and turn ignition to off position. CAUTION: Failure to position the ignition key to any position except off will cause discharge of the battery.

MAINTENANCE SCHEDULE

INSPECT BEFORE EACH USE

-Loose fasteners: Be sure all fasteners are at proper torque. Especially guards and blades.

-**Parking brake**: If brake does not keep unit from rolling, brake must be adjusted or repaired.

-**Tires:** Always check and maintain proper tire pressure (See tire sidewall for recommendation). Check for damage due to sharp rocks, objects or stumps.

-**Operator Presence System:** The engine should not start unless the PTO switch is disengaged and the control levers are locked in the neutral position. Any attempt to leave the seated position with the PTO switch engaged will kill the engine.

-**Oil level:** To prevent damage to engine, always check and maintain proper oil level. Never operate engine with the oil level below the add mark on the dipstick. Be sure to tighten the dipstick securely after inspection. Refer to engine manual for additional information.

INSPECT EVERY 8 HOURS

-**Proper cleaning:** Remove any build up of grass, dirt or debris with a brush or cloth from engine, battery, deck and and transaxles. Do not use harsh chemicals or abrasives. Keep all painted surfaces and wheels free of oil and gasoline. Protect all painted surfaces with an automotive wax. Do not spray unit with water or store outdoors unprotected. Water can invade sealed bearings and reduce component life.

Do not spray water onto hydrostatic transmissions. This will cause injection of water into the unit causing failure.

-Air filter: The engine will not run properly with a dirty or damaged air filter. Check filter before starting the engine. Check for buildup of dirt or debris. Replace if bent, clogged, or damaged.

-**Oil level:** To prevent damage to engine, always check and maintain proper oil level. Never operate engine with the oil level below the add mark on the dipstick. Be sure to tighten the dipstick securely after inspection.

MAINTENANCE SCHEDULE

INSPECT EVERY 25 HOURS

-Lubrication: Grease all pivot points with a high temp grease

-Battery, check and clean: Keep battery terminals clean and tight. Periodic charging will extend its life. Clean terminals with a wire brush and coat with a petroleum jelly.

-Change engine oil and filter: Use only quality detergent oil. See engine manual for instructions. Select viscosity grade according to your expected environmental temperature.

-Blades: Best results will come from sharp blades. Replace if bent, damaged or worn.

-Engine air screen: Screen must be clean and free of debris for proper engine cooling. Clean with a brush or cloth. Do not spray with pressurized water.

-Muffler: Inspect for damage or corrosion. Keep free of grass or debris to prevent fire.

INSPECT CHECK EVERY 100 HOURS

-Clean engine cooling fins: Clogged cooling fins can damage engine due to overheating.. Keep fins and external surfaces of the engine clean.

-Replace air filter: The engine will not run properly with a dirty or damaged air filter. Check filter before starting the engine. Check for buildup of dirt or debris. Replace if bent, clogged, or damaged. See engine manual for detailed instructions.

-Replace spark plugs: See engine manual for detailed instructions.

INSPECT EACH SEASON

-**Belts:** Check belts for wear and deterioration. See service and adjustments.

-Spark plug: See engine manual for detailed instructions.

-Replace in-line fuel filter: Replace every season.

INSPECT BEFORE STORAGE

-Change engine oil and filter: See engine manual for detailed instructions.

-Lubrication: Grease all pivot points with a high temp grease.

-Check battery: Keep battery terminals clean and tight. Periodic charging will extend its life. Clean terminals with a wire brush and coat with a petroleum jelly.

-Loose fasteners: Be sure all fasteners are at proper torque, especially guards and blades.

SERVICE / ADJUSTMENTS

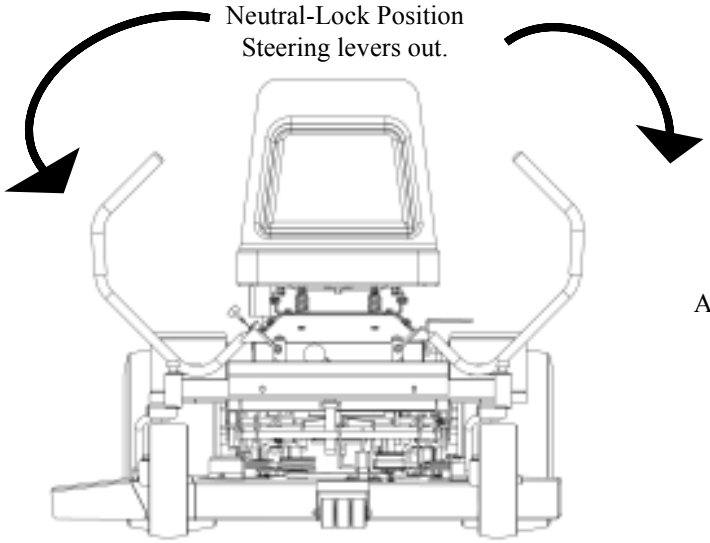
CAUTION: Before performing any service or adjustments do as follows:

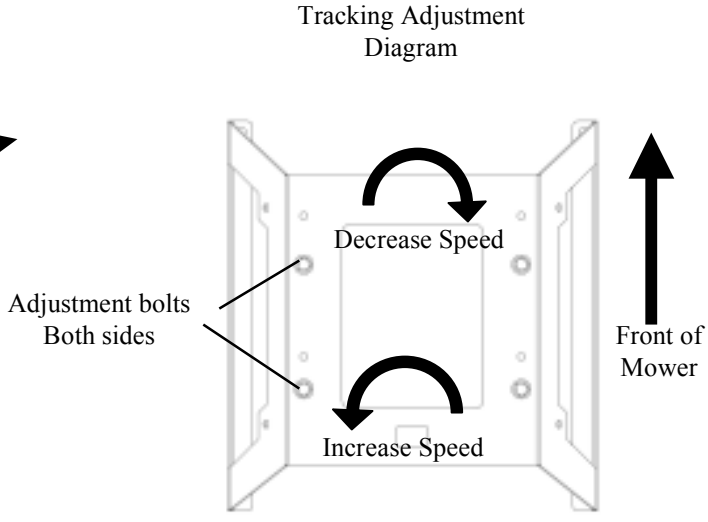
1. Turn off PTO switch.
2. Position unit on smooth flat surface.
3. Place steering levers in outward, neutral-locked position.
4. Turn ignition key "OFF" and set parking brake.
5. Wait for all moving parts to stop and disconnect spark plug wire.

TRACKING

Adjustments to the unit may need to be made if the unit does not track in a straight line. The primary reason for the unit not tracking straight is incorrect or unbalanced tire pressure. Before making any adjustments first check and adjust the tire pressure. DO NOT EXCEED MAXIMUM RECOMMENDED TIRE PRESSURE.

ADJUST LINKAGE: Place steering levers outward locking them in the neutral position. Turn off engine and raise seat. Under the seat are (4) adjustment bolts. The two adjustment bolts toward the seat mount are adjustments for the forward travel. The two bolts toward the engine or are for the reverse travel. Clockwise movement for these adjustments will decrease or slow the travel speed of the individual side. Counterclockwise movement will increase the travel of the individual side. The linkage is factory set to maximum performance. Adjustment is made by rotating the adjustment bolt clockwise on the opposite side that the unit tracks toward. Adjust forward and reverse to track straight as needed. When accomplished adjustment to the steering levers may need to be done. This is made by loosening the the two bolts on the steering lever and aligning with the other. Travel of the steering levers from front to rear may be accomplished in the same manner.





SERVICE / ADJUSTMENTS

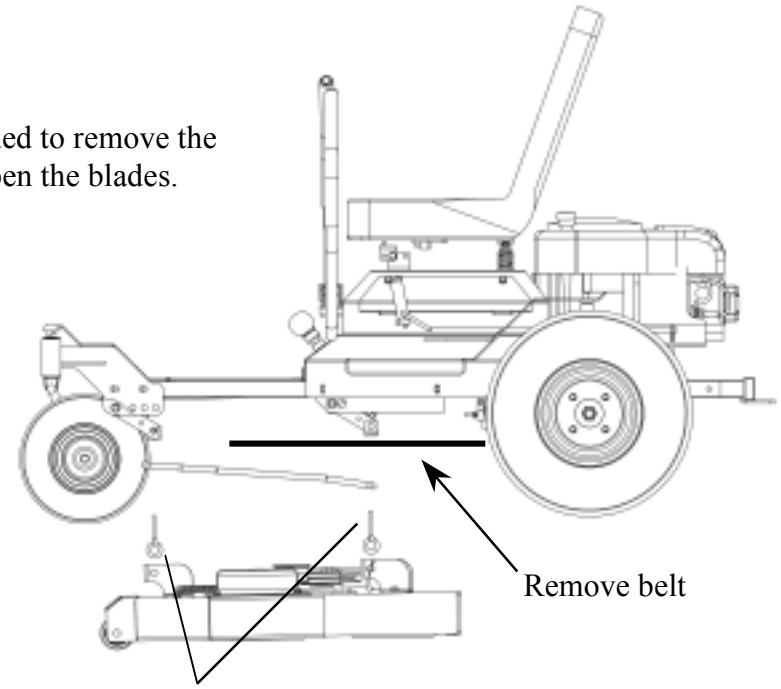
REMOVING THE MOWER DECK

1. Turn off engine and engage parking brake.
2. Rotate cutting height lever counterclockwise to lowest cutting position.
3. Remove bolt from pickup point located at the front of the deck.
4. Remove cotter pins on rear hanger points and slide out stabilizer bars.Disconnect tension spring bolt from tension bracket.
5. Remove belt from mower pulley and electric clutch.
6. Slide mower deck from under unit.

INSTALLING THE MOWER DECK

1. Be sure the cutting height lever is in the lowest position.
2. Position mower deck under unit.
3. Install belt around mower pulley and electric clutch.
4. Install stabilizer bars into rear hanger brackets through lift points and install cotter pins. Be sure eye bolt is between bracket sides.
5. Install bolt in front hanger bracket passing through eyebolt in the same manner as rear and tighten snug.
6. Reattach tension spring bolt and tighten.

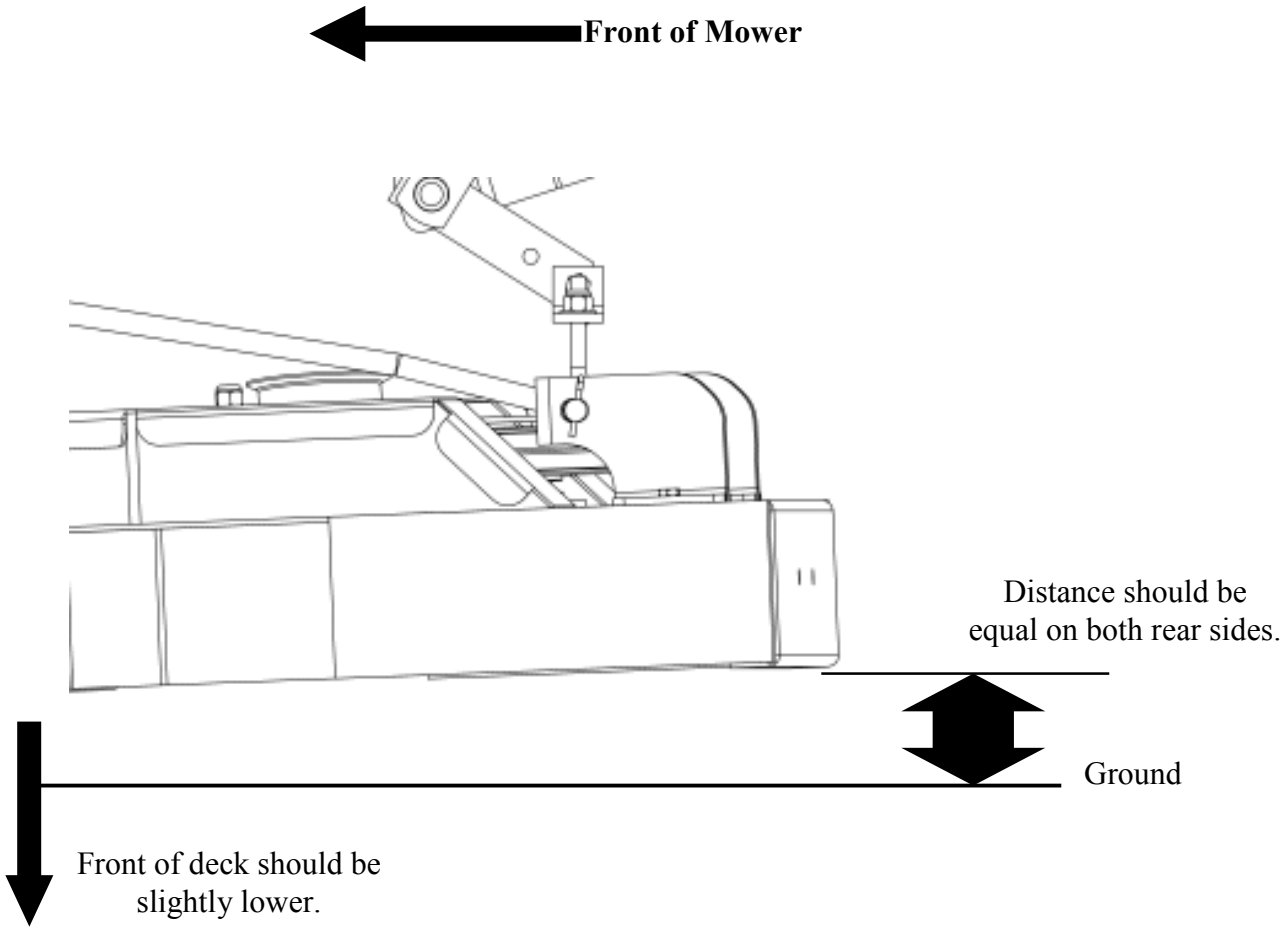
It is recommended to remove the deck to sharpen the blades.



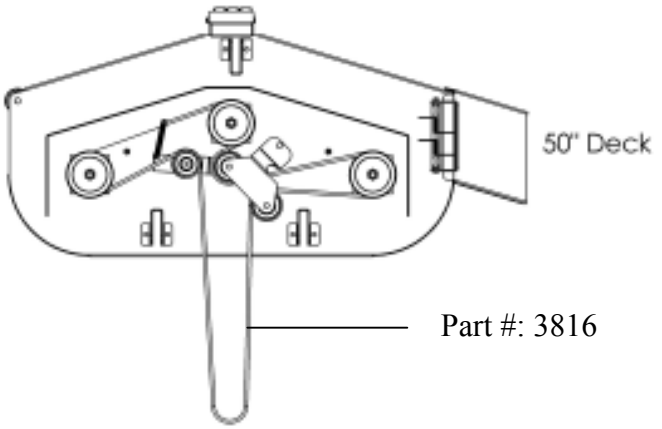
SERVICE / ADJUSTMENTS

LEVELING THE MOWER DECK

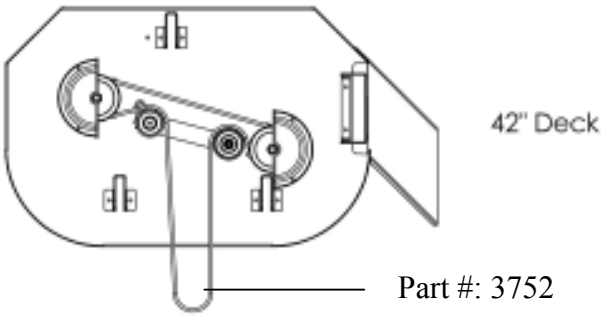
1. Position unit on a smooth level surface.
2. For side to side leveling, measure the distance from the floor to the bottom edge at the rear of the deck. The measurement should be equal within 1/16 inch side to side. Adjustment can be made by loosening locking nut on rear eyebolt hangers and adjusting up or down as needed.
3. For front to rear pitch adjustment, loosen locking nut on front eyebolt and adjust up or down as needed. Proper pitch measurement is 1/8" to 1/4" lower at the front of the deck.



SERVICE / ADJUSTMENTS



Part #: 3816



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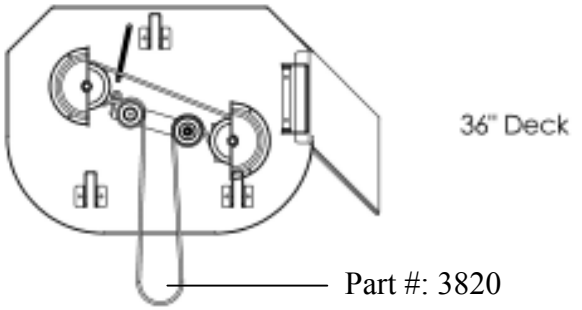

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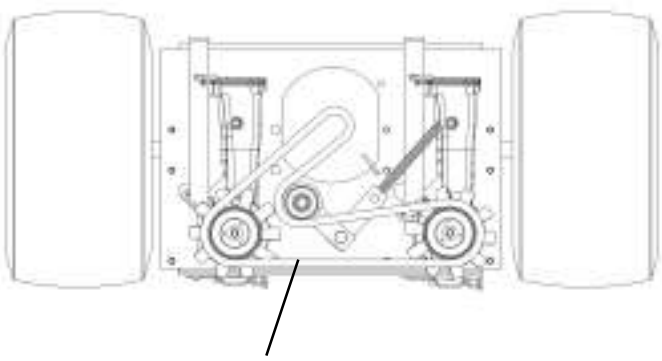


66LR- Transmission Belt

BELTS

Clutch drive belt replacement

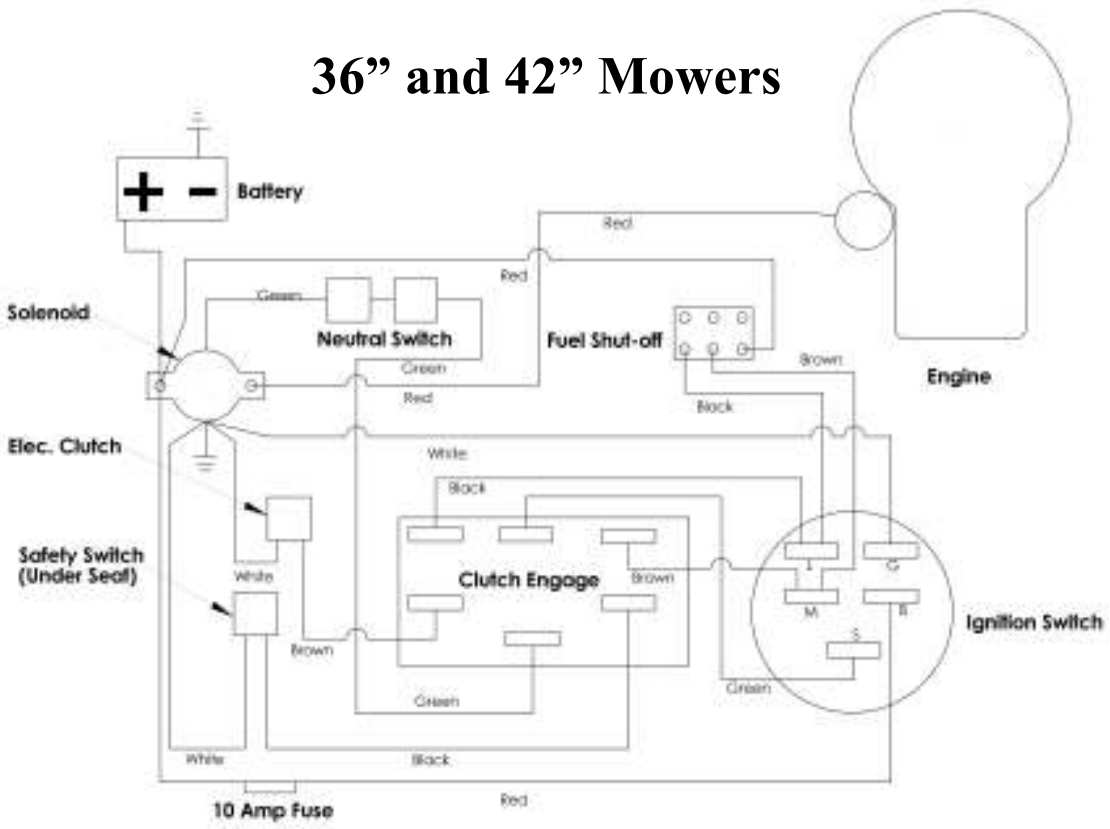
1. Remove belt covers.
2. Disconnect tension idler from tension bracket.
3. Remove belt from mower pulley and electric clutch.
4. Install new belt onto electric clutch and mower pulley and check for proper routing and clearance.
5. Reconnect idler tension bolt to tension bracket.

Transaxle belt replacement

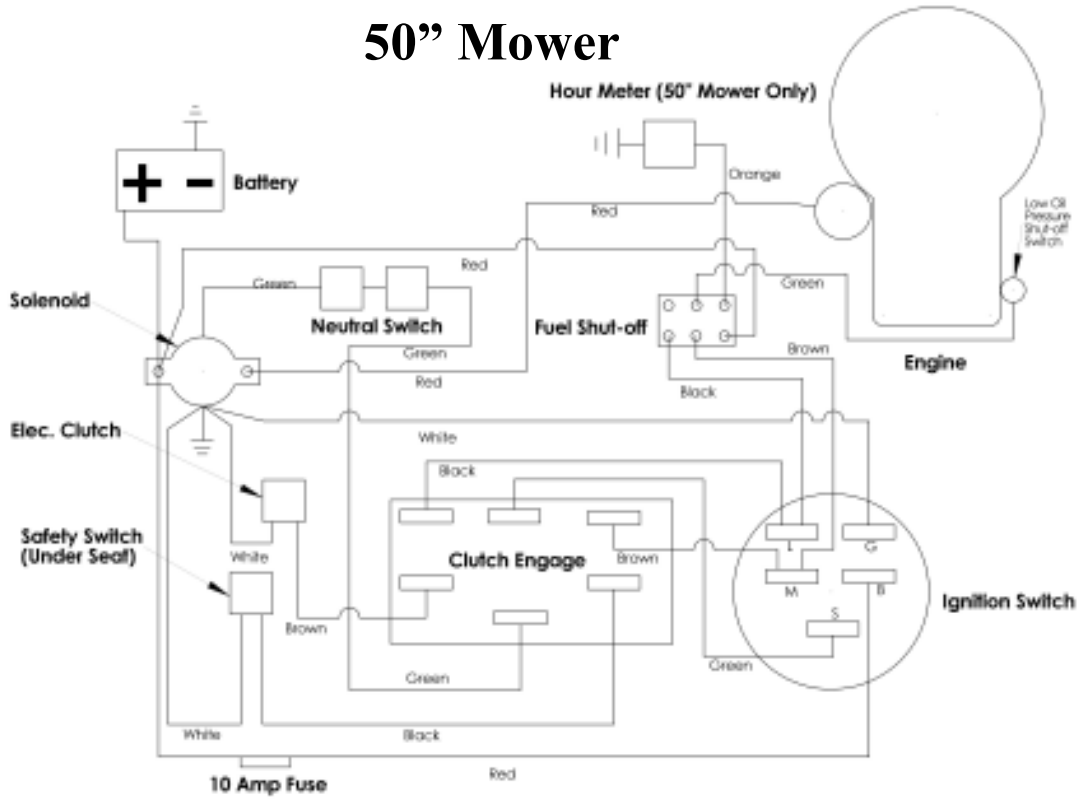
1. Remove clutch drive belt. *See clutch belt replacement.*
2. Disconnect wiring from electric clutch.
3. Disconnect idler spring from tension bracket.
4. Remove bolt and washer from bottom of electric clutch and slide clutch from engine crankshaft, set aside.
5. Remove belt from transaxles and engine pulley.
6. Install new belt. Check for proper routing and clearance.
7. Reinstall electric clutch carefully aligning keyed portion of clutch and keyway in crankshaft. Reinstall bolt and washer. Washer is "*cupped"* be sure to place "*cupped"* side of washer towards the clutch body.
8. Reconnect tension idler to tension bracket.
9. Reconnect wiring harness to electric clutch.
10. Reinstall clutch drive belt. *See clutch belt replacement.*

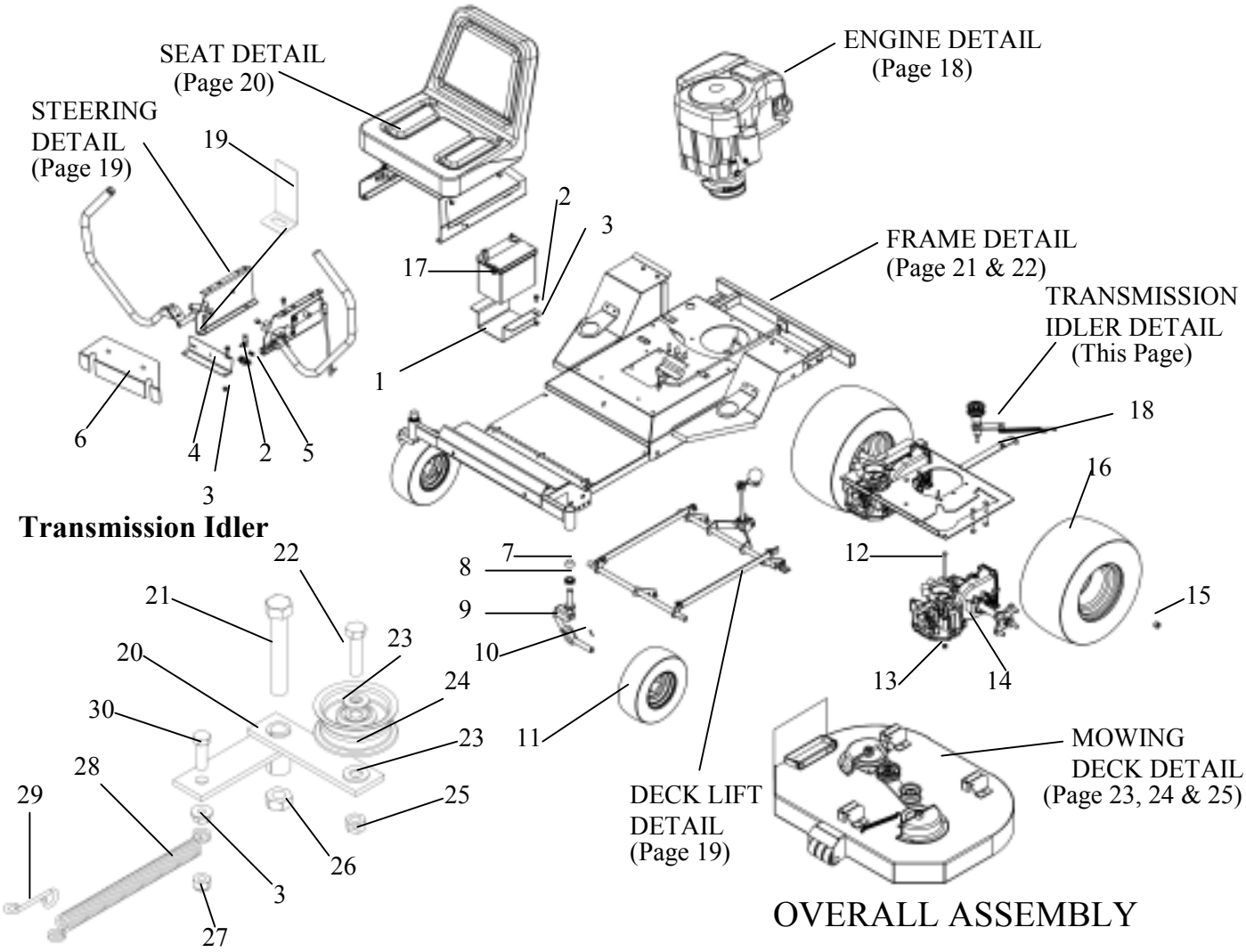
WIRING DIAGRAMS

36” and 42” Mowers



50” Mower





OVERALL ASSEMBLY

Item #	Description	Part #
1	Battery Box	3696TK
2	5/16-18 X 3/4 Serr Flg Bolt	NB596
3	5/16-18 Serrated Flange Nut	NB170
4	Nuetral Switch Bracket Painted	3704TK
5	Return to Neutral Switch	3695
6	Steering Cover	3644TK
7	3/4 Push Nut Blk Plastic	NB687
8	Bearing	CB58
9	Caster Weldment	5072
10	1/8 X 1 Cotter Pin	NB126
11	Front Tire for 36" and 42"	3754
	Front Tire for 50" Only	5057
12	3/8-16 X 4 HCC GR5 Bolt	NB645
13	3/8-16 Nyloc Nut	NB182
14	ZTR Trans. Right- NOT FOR RE-SALE	3600
	ZTR Trans. Left- NOT FOR RE-SALE	3601
15	Lug Nut	2203LN
16	Rear Tire For 36"	3755
	Rear Tire For 42"	3604
	Rear Tire For 50"	3756
17	Battery 230 CCA	EBAT230
18	Hydro Release	3678TK
19	Spring - Interlock Switch	3751

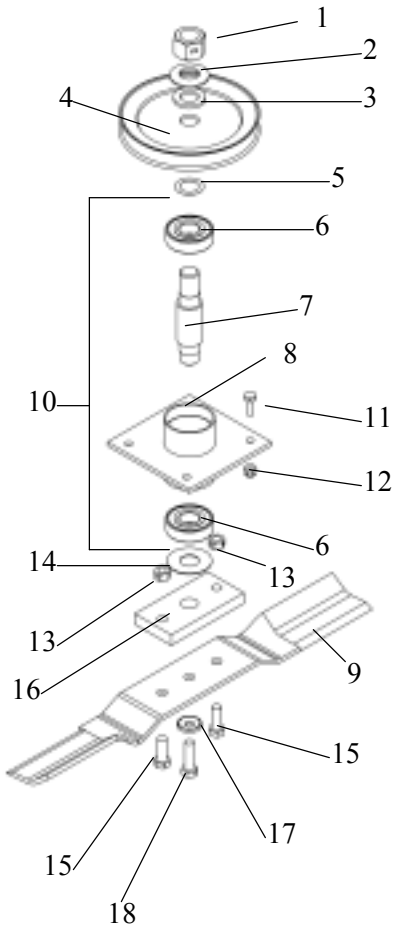
Item #	Description	Part #
20	Transmission Idler Arm	3690TK
21	1/2-13 X 3 HCC GR5 Bolt ZP	NB131
22	3/8-16 X 1 1/2 HCCGR5ZP	NB107
23	3/8 SAE Washer	NB272
24	Idler Pulley OD-2.16"	B27
25	3/8-16 2-Way Lock Nut	NB280
26	1/2-13 2-Way Jam Lock Nut	NB121
27	5/16-18 Nyloc Nut	NB181
28	Clutch Rod Spring	682S
29	Wire Link For Idler Arm	BRS6H
30	5/16-18 X 1 HCC GR5 ZP	NB501

Not Pictured

Description	Part #
Solenoid Assembly (All Models)	9043
Wiring Harness (36 and 42" Models Only)	3720
Wiring Harness (50" Models Only)	3804
Hour Meter (50" Models Only)	3803
Battery Hold Down, 15" Tarp Strap	BHOLD
1/4-20 X 3/4 GR5 ZP (2)	NB250
1/4-20 Flange Nut (2)	NB524
Belt Snubber (50" Mower Only)	3819TK

BLADE DRIVER

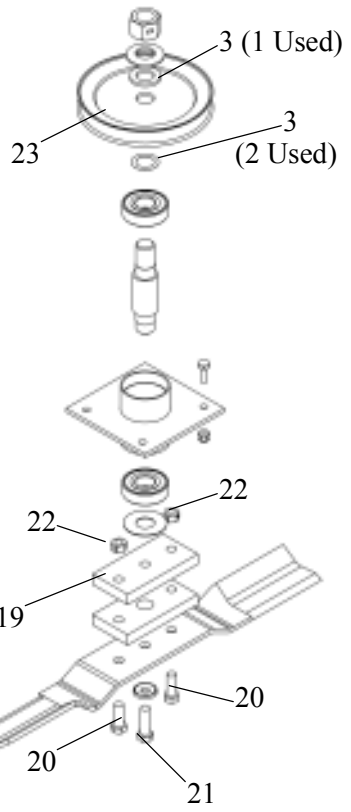
For 42 and 50” Mowers



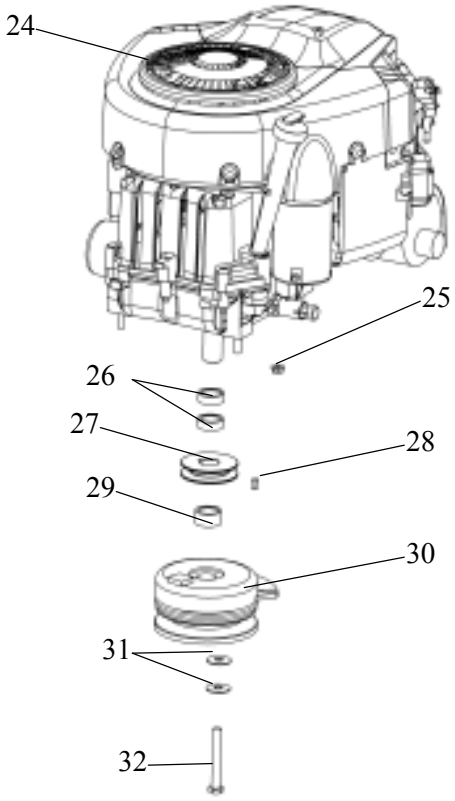
Item #	Description	Part #
1	3/4-16 2 Way Lock Nut	NB175
2	1.5x.761x.098x.134 Belleville Washer	AS155
3	3/4ID X 1 1/4OD 10 GA. Washer	NB184
4	Blade Pulley- 5" (42" Mower Only)	3785
5	Washer For Blade Driver	NB179
6	Blade Bearing	B98
7	Blade Shaft 4.25"	9076
8	Bearing Housing	9057TK
9	36" Mower - 18" Blade	9014
	42" Mower - 20 1/2" Blade	9004
	42" Mower - 22" Blade	9005
	17.5" Blade for 50" Mower	5059
10	Blade Driver Assy	9018
11	1/4-20 X 3/4 GR5 ZP	NB250
12	1/4-20 Nylok Nut	NB180
13	3/8-24 Two Way Locknut	NB216
14	Washer	B98W
15	3/8-24 X 1 Bolt	NB238
16	Blade Mount Plate	9008
17	SP Washer Bellvl. PLN .413 X .945 X .118	NB607
18	3/8-24 X 1 Engine Bolt Locktite	NB238N
19	Blade Mount Plate Spacer (36" Only)	9024
20	3/8-16 X 1 1/2 HCCGR5ZP (36" Only)	NB107
21	3/8-24 X 1 1/2 HCC GR5 ZP Locktite (36" Only)	NB167N
22	3/8-16 2-Way Lock Nut (36" Only)	NB280
23	Blade Pulley 4.5" (36" & 50" Only)	B4104TK

BLADE DRIVER

For 36” Mowers

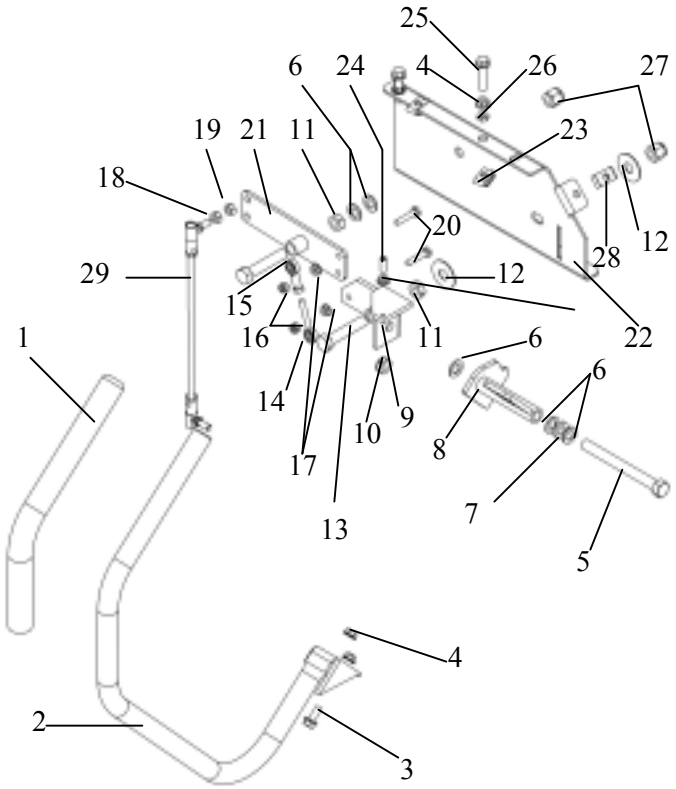


ENGINE SETUP



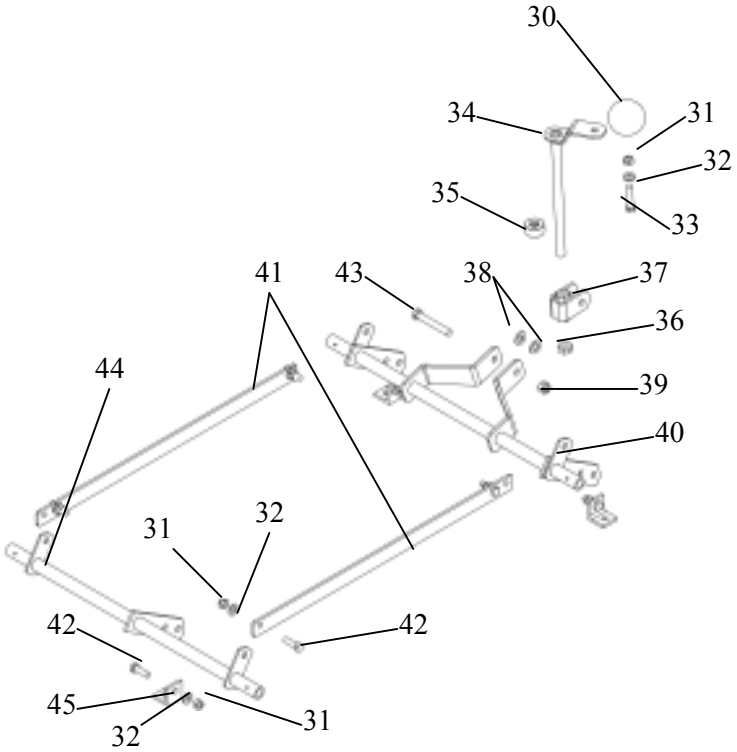
Item #	Description	Part #
24	14 HP B&S Engine (36" Mower)	N/A
	17.5 HP B&S Engine (42" Mower)	N/A
	18 HP B&S Engine (42" Mower)	N/A
	20 HP B&S Engine (50" Mower)	N/A
25	5/16-18 Serrated Flange Nut	NB170
26	Spacer Engine Pulley	BB105SL
27	Motor Pulley 3"	3753
28	1/4 X 1/2 Key Stock	4258
29	Engine Pulley Spacer Short .687	689S
30	Electric Clutch Drop Pulley	688ECDP
	Electric Clutch (50" Mower Only)	3813
31	Washer Belleville Engine Pulley	NB699
32	7/16-20 X 3.25 HCF GR5 ZP	NB705

STEERING (RIGHT)



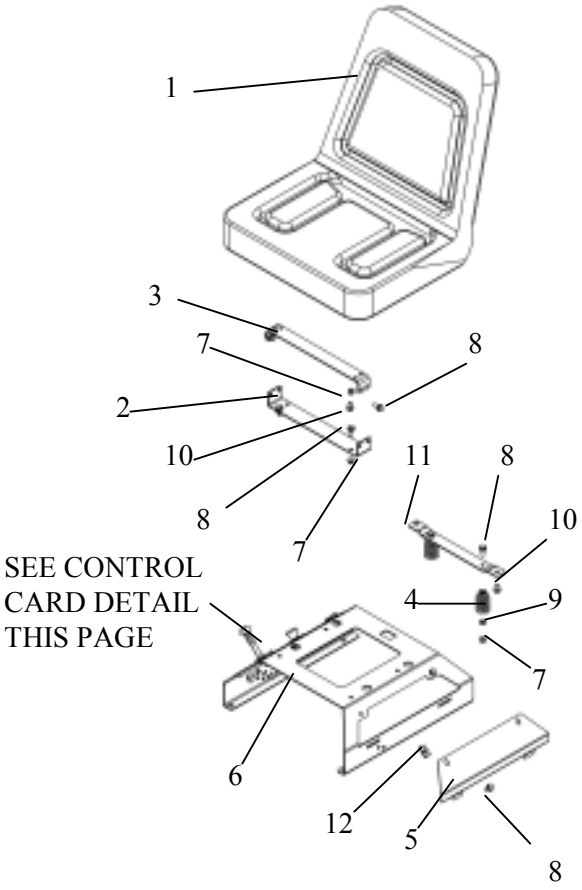
Item #	Description	Part #
1	Directional Handle Grip	3673
2	Directional Handle Weldment	3685TK
3	5/16-18 X 3/4 Serr Flg Bolt	NB596
4	5/16-18 Serrated Flange Nut	NB170
5	1/2-13 X 5 HCC GR5 ZP	NB155
6	1/2 NR Mach Bushing 14 GA	NB177
7	1/2 ID X 7/8 OD X 1/8 Nylon Washer	NB682
8	Handle Mount Weldment Right	3635TK
	Handle Mount Weldment Left	3636TK
9	Pivot Plate Right Weldment	3699TK
	Pivot Plate Left Weldment	3700TK
10	1/2-13 Nyloc Jam Nut	NB688
11	1/2-13 2-Way Jam Lock Nut	NB121
12	Washer	TR150W
13	1/2-13 X 2 1/2 HCC GR5 ZP	NB510
14	1/4 Rod End Male1/4-28	3721
15	1/4 Rod End Female 1/4-28	3708
16	1/4-20 Nylok Nut	NB180
17	1/4-20 Flange Nut	NB524
18	5/16-24 Hex Nut	NB215
19	5/16-24 ZP 2-Way Lock Nut	NB448
20	1/4-20 X 1 1/4 HTC GR5 ZP	NB103
21	Universal Pivot Plate Weldment	3698TK
22	Control Card Left	3620TK
	Control Card Right	3621TK
23	Tinnerman Clips 5/16-18 Heavy Duty	3669
24	1/4-20 X 3/4 SSC Plain	NB310
25	5/16-18 X 1 1/2 Flge Serr. Bolt	NB254
26	5/16-24 Jam Nut	NB190
27	1/2-13 Nyloc Nut	NB281
28	Tinnerman Clips 5/16-18	3706
29	Directional Control Linkage	3670
30	Plastic Knob- Black	4857
31	3/8-16 2-Way Lock Nut	NB280
32	3/8 Hardened Washer	NB196
33	3/8-16 X 1 1/4 GR5 ZP	NB618
34	Height Adjust Crank	3710TK
35	Thrust Bearing	T151
36	1/2-13 2-Way Jam Lock Nut	NB121
37	Rear Height Lifter	3705TK
38	3/8 SAE Washer	NB272
39	3/8-16 Nyloc Nut	NB182
40	Rear Torsion Weldment	3684TK
41	Front - Back Height Link	3260TK
42	5/16-18 X 1 HCC GR5 ZP	NB501
43	3/8-16 X 2 1/2 HCC GR5 ZP	NB221
44	Front Torsion Weldment	3683TK
45	Lift Pivot	3663TK
NOT PICTURED		
Spacer .790 OD X .540 ID X .560 LG (2)		ES001

DECK LIFT



SEAT BASE ASSEMBLY

Item #	Description	Part #
1	Seat 15" Back No Arm Rest (36" Mower Only)	3790
	Seat 15" Back With Arm Rest (42" Mower Only)	3791
	Seat 18" Back With Arm Rest (50" Mower Only)	3792
2	Seat Bracket	3807TK
3	Seat Hinge	3815TK
4	Tapered Spring	3609
5	Control Cover	3645TK
6	Seat Mount	3613C
7	5/16-18 Serrated Flange Nut	NB170
8	5/16-18 X 3/4 Serr Flg Bolt	NB596
9	5/16 SAE Washer	NB556
10	5/16-18 X 1/2 Serr. Flg Bolt	NB252
11	Seat Spring Bracket	3809TK
12	Tinnerman Clip 5/16-18	3706
13	5/16-18 Nyloc Nut	NB181
Not Pictured		
Operator Presence Switch		3798

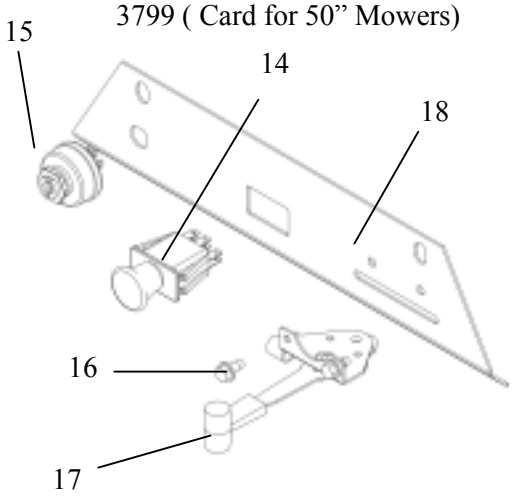


SEE CONTROL CARD DETAIL THIS PAGE

CONTROL CARD

3722 (Card for 36” & 42” Mowers)

3799 (Card for 50” Mowers)

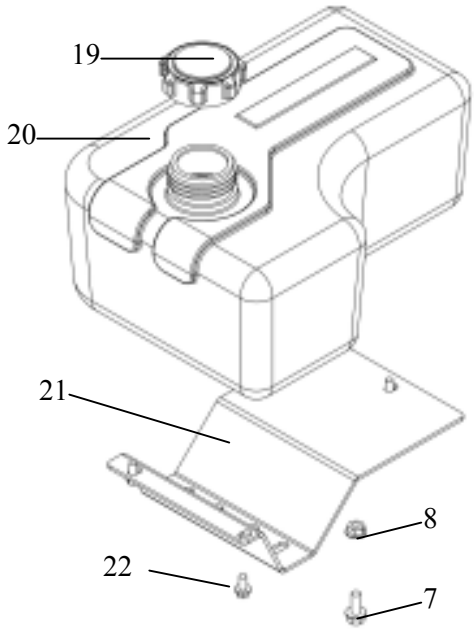


Item #	Description	Part #
14	PTO Switch	3605
15	Key Switch	3623
16	1/4-20 X 1/2 MSC ZP Hex Washer	NB114
17	Throttle Cable Assembly (36" & 42" Mowers)	3640
	Throttle Control 35" (50" Mower Only)	3788
18	Control Cover Instruments (Right Side)	3646TK

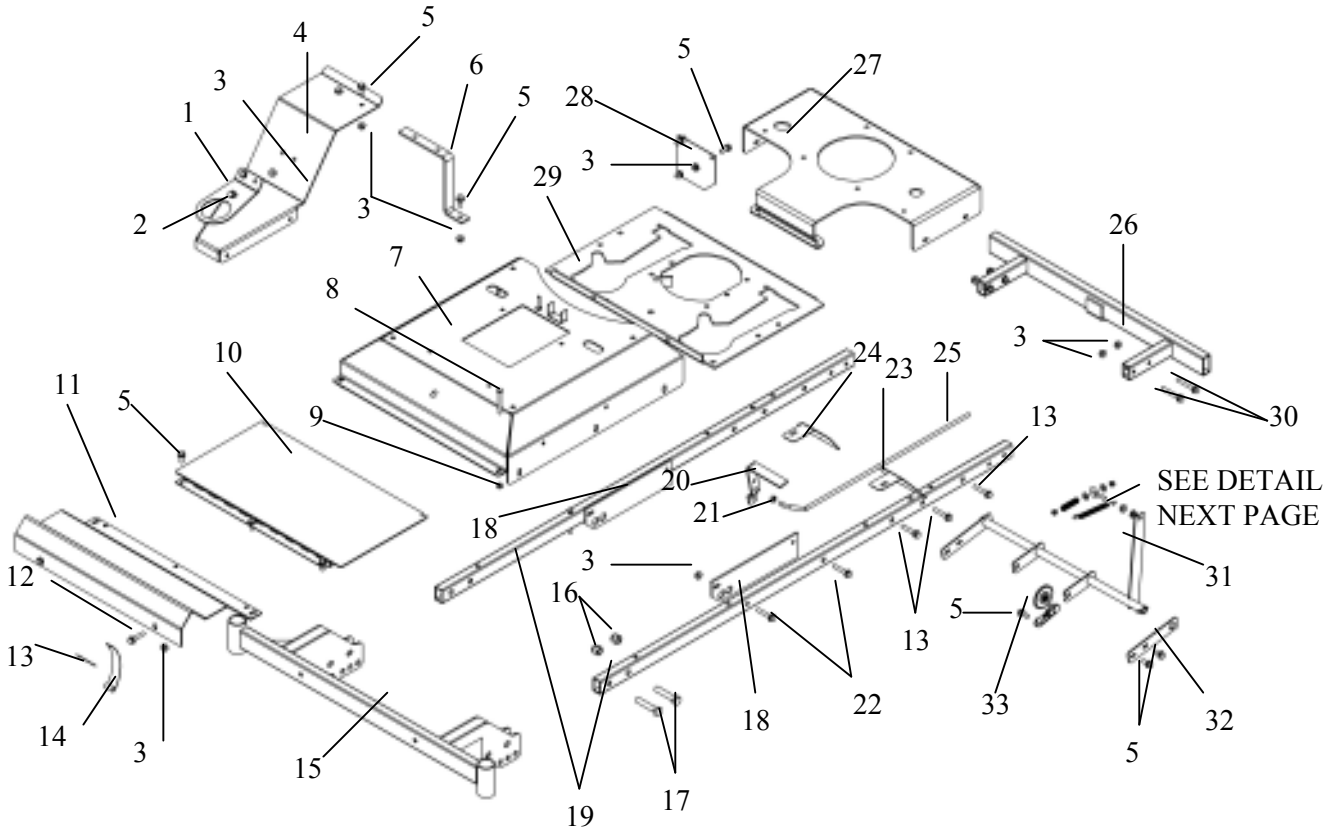
FUEL SUPPLY SYSTEM

(3259 For entire assembly)

Item #	Description	Part #
19	Gas Cap	6102NC
20	Gas Tank Plastic Black	6102T
21	Gas Tank Bracket	3258TK
22	1/4-20 X 1/2 Bolt	NB109



FRAME for 36” and 42” Mowers

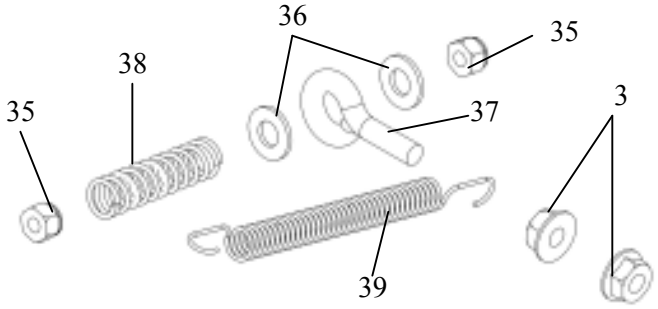


Item #	Description	Part #
1	Beverage Retainer	3643TK
2	5/16-18 X 1/2 Serr. Flg Bolt	NB252
3	5/16-18 Serrated Flange Nut	NB170
4	36" Mower Fender Left	3742TK
	36" Mower Fender Right	3742RTK
	42" Mower Fender Left	3641TK
	42" Mower Fender Right	3642TK
5	5/16-18 X 3/4 Serr Flg Bolt	NB596
6	Fender Mount	3654TK
7	Seat Base Weldment	3719C
8	1/4-20 X 2 1/2 HTC GR5 ZP	NB163
9	1/4-20 Flange Nut	NB524
10	Access Plate	3269
	Access Plate Hinge	
11	Kick Plate	3630TK
12	5/16-18 X 1 1/2 Flge Serr. Bolt	NB254
13	Height Adjust Bracket	3619TK
14	Height Adjust Indicator	3671C
15	Front Frame Weldment	3261TK

Item #	Description	Part #
16	1/2-13 Nyloc Nut	NB281
17	1/2-13 X 2 1/2 HCC GR5 ZP	NB510
18	Rear Hangar Bracket	3264TK
19	Frame Side Weldment	3639TK
20	E-Brake Handle	3653TK
21	5/16-18 ZP 2 Way Lock Nut	NB558
22	5/16-18 X 1 3/4 Flge Serr Bolt	NB515
23	Transmission Fan Cover	3712TK
24	Trans Fan Cover Right Side	3806TK
25	E-Brake Side Link	3651
26	Bumper Weldment	3686TK
27	Upper Motor Base	3611TK
28	Rear Cover	3711TK
29	Transmission Mount	3703TK
30	5/16-18 X 2 1/4 Flang Serr. GR5 ZP	NB622
31	Parking Brake Weldment	3797TK
32	Brake Mount Plate	3267TK
33	Brake Assembly Cog Right Side	3600CB-BA
	Brake Assembly Cog Left Side	3601CB-BA

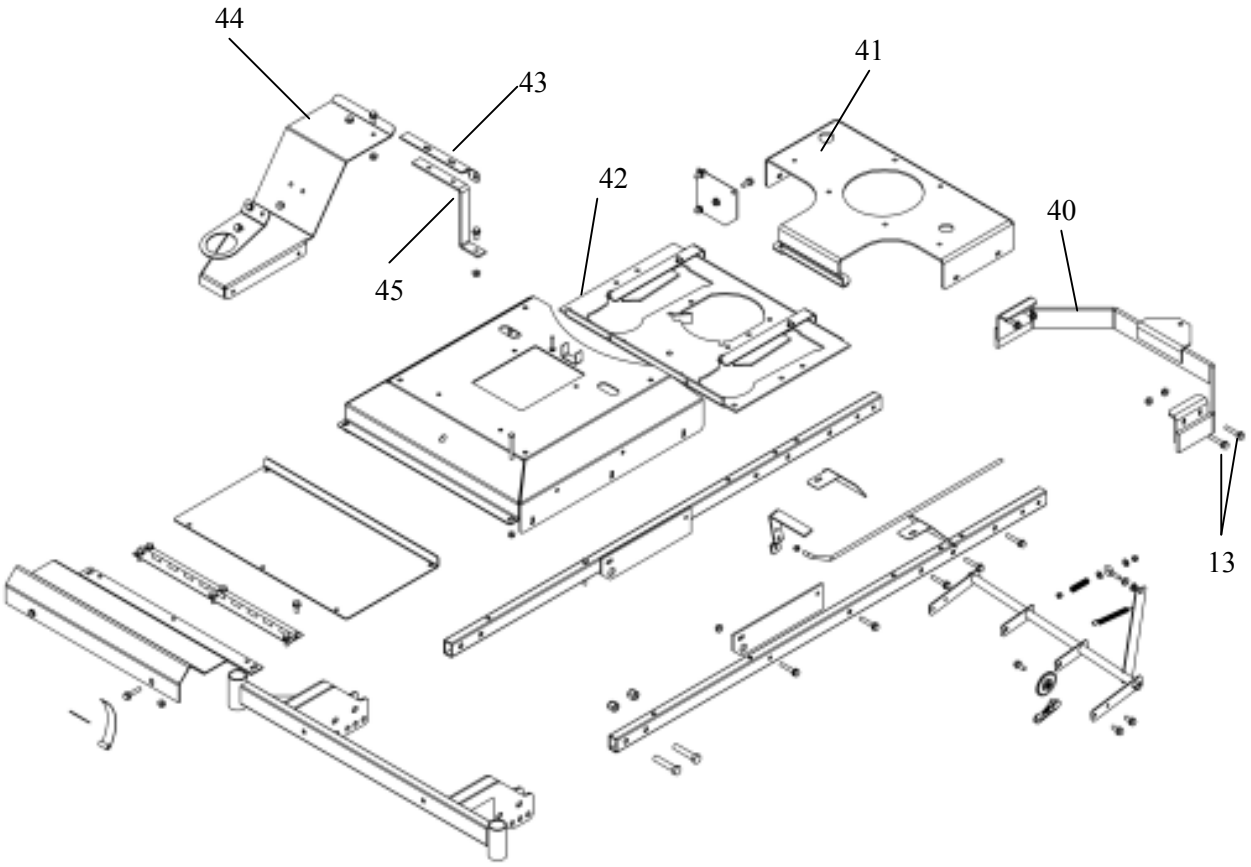
Parts unique to 50” mower frame on next page.

BRAKE LINKAGE DETAIL (All Models)



Item #	Description	Part #
35	1/4-20 Nylok Nut	NB181
36	5/16 SAE Washer	NB275
37	5/16-18 X 1 Eye Bolt	NB202
38	Spring	TR148S
39	Spring	T2SM

FRAME FOR 50” MOWER

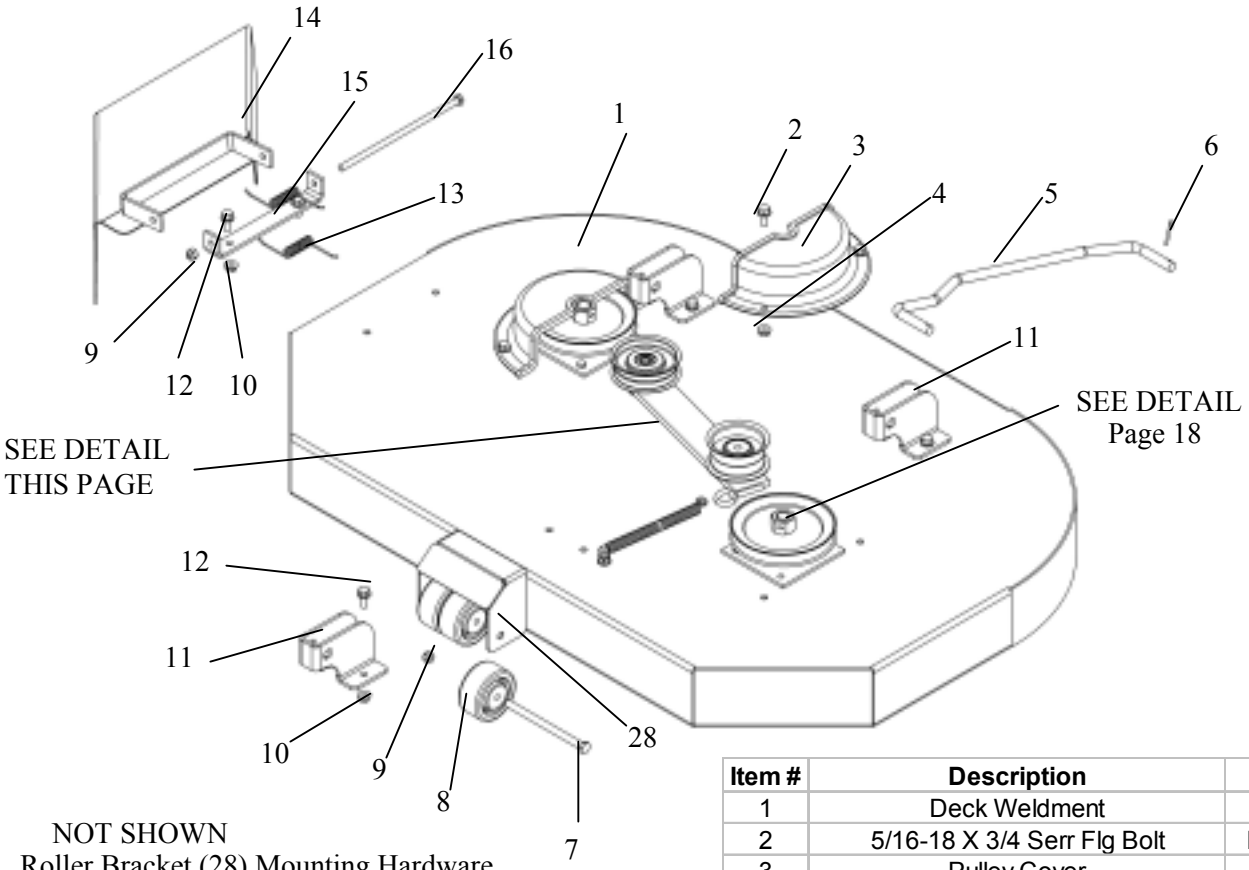


Item #	Description	Part #
40	Bumper Weldment	3778TK
41	Upper Motor Base	3777TK
42	Transmission Mount	3787TK
43	Choke Mount	3810TK
44	50" Mower Fender Right	3783TK
	50" Mower Fender Left	3784TK
45	Fender Mount	3782TK

Not Pictured		
DESCRIPTION	PART #	QTY
Choke Cable	3789	1
3/8 Split Lock Washer	NB711	1
3/8-24 HNF ZP	NB456	1

These parts unique to 50” mower frame only.

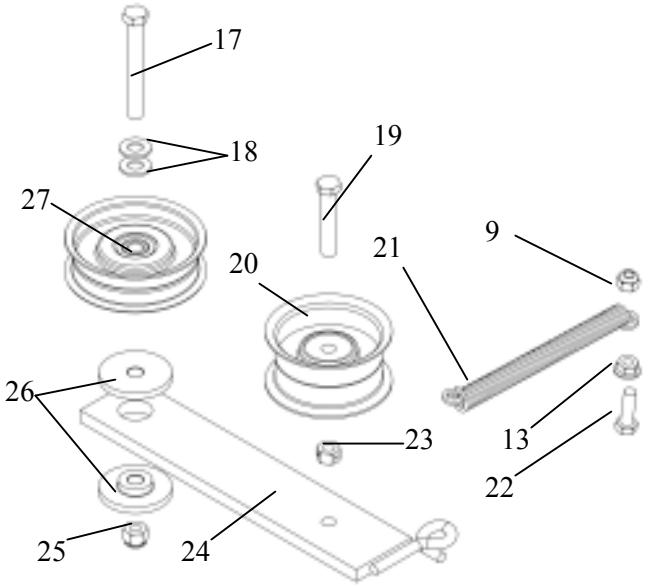
36” MOWING DECK



NOT SHOWN
Roller Bracket (28) Mounting Hardware

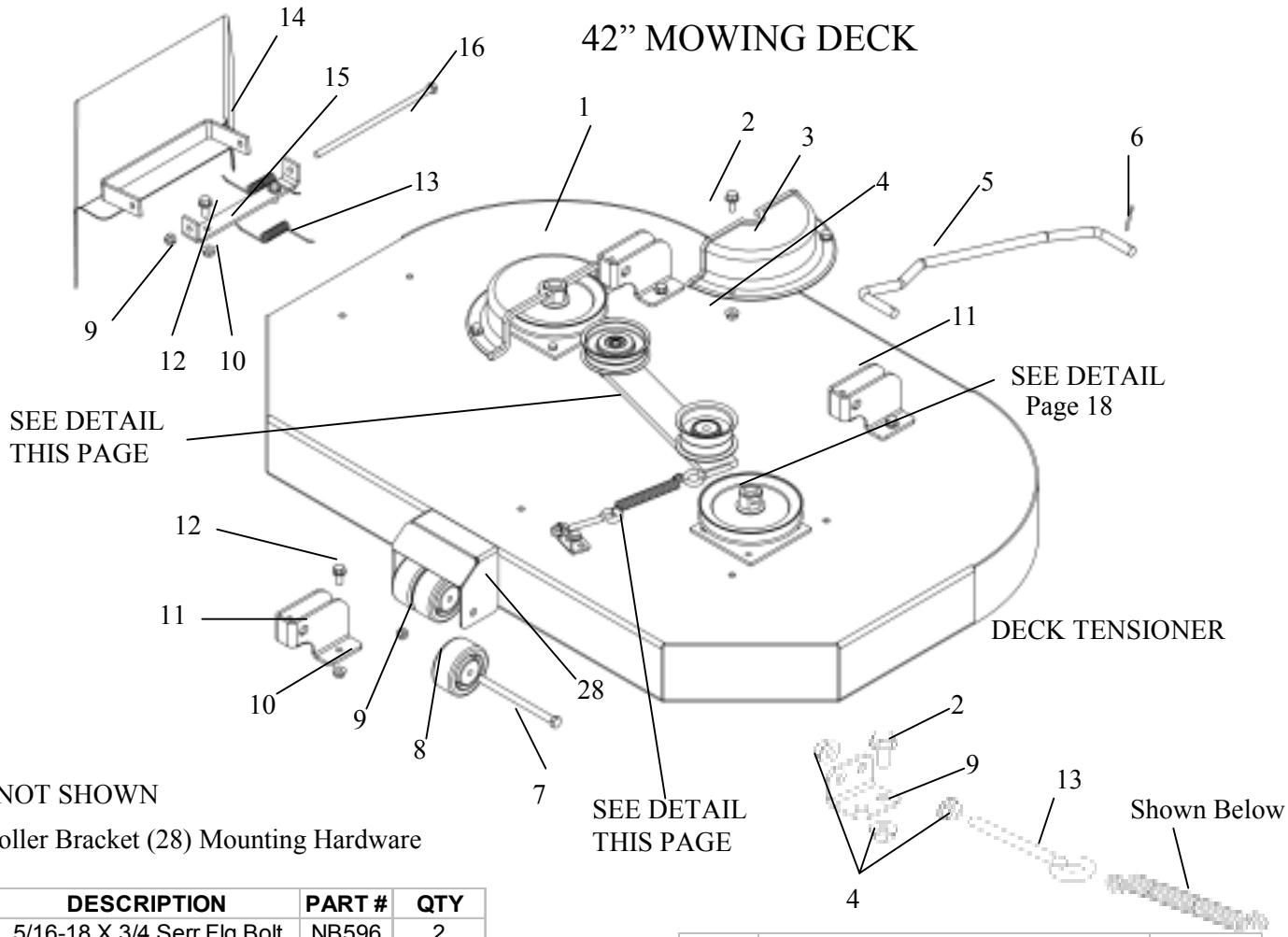
DESCRIPTION	PART #	QTY
5/16-18 X 3/4 Serr Flg Bolt	NB596	2
5/16-18 Serrated Flange Nut	NB170	2

DECK IDLER



Item #	Description	Part #
1	Deck Weldment	3750C
2	5/16-18 X 3/4 Serr Flg Bolt	NB596
3	Pulley Cover	3743
4	5/16-18 Serrated Flange Nut	NB170
5	Sway Bar Right	3664
	Sway Bar Left	3665
6	1/8 X 1 Cotter Pin	NB126
7	3/8-16 X 5 1/2 GR5 ZP	NB575
8	Anti-Scalp Roller	AS001
9	5/16-18 Nyloc Nut	NB181
10	5/16-18 Serrated Flange Nut	NB170
11	Lift Bracket	3738TK
12	5/16-18 X 3/4 Serr Flg Bolt	NB596
13	Chute Spring	CH5S
14	Grass Chute Weldement	3757TK
15	Grass Chute Mount	6030
16	5/16-18 X 8 1/2 HCC GR2 ZP	NB136
17	3/8-16 X 3 HTC GR5 ZP	NB164
18	3/8 SAE Washer	NB272
19	3/8-16 X 2 HCC GR5 ZP	NB198
20	Idler Pulley	7509
21	Clutch Rod Spring	682S
22	5/16-18 X 1 HCC GR5 ZP	NB501
23	3/8-16 2-Way Lock Nut	NB280
24	Deck Idler Weldement	3744TK
25	3/8-16 Nyloc Nut	NB182
26	Idler Bushing	6037
27	Idler Pulley	B527
28	Front Roller Bracket Assy	4018TK

42” MOWING DECK

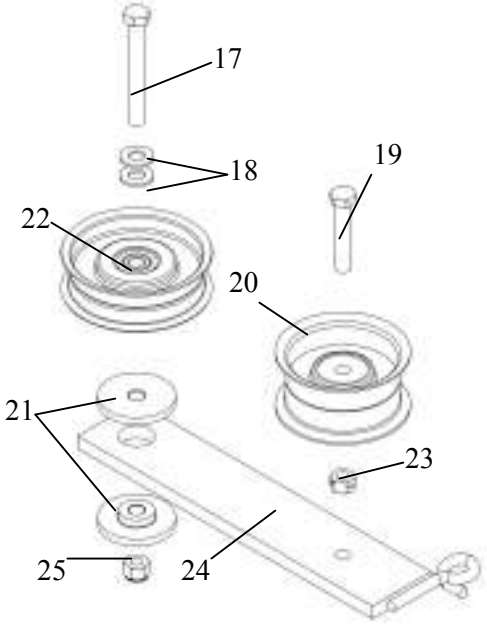


NOT SHOWN

Roller Bracket (28) Mounting Hardware

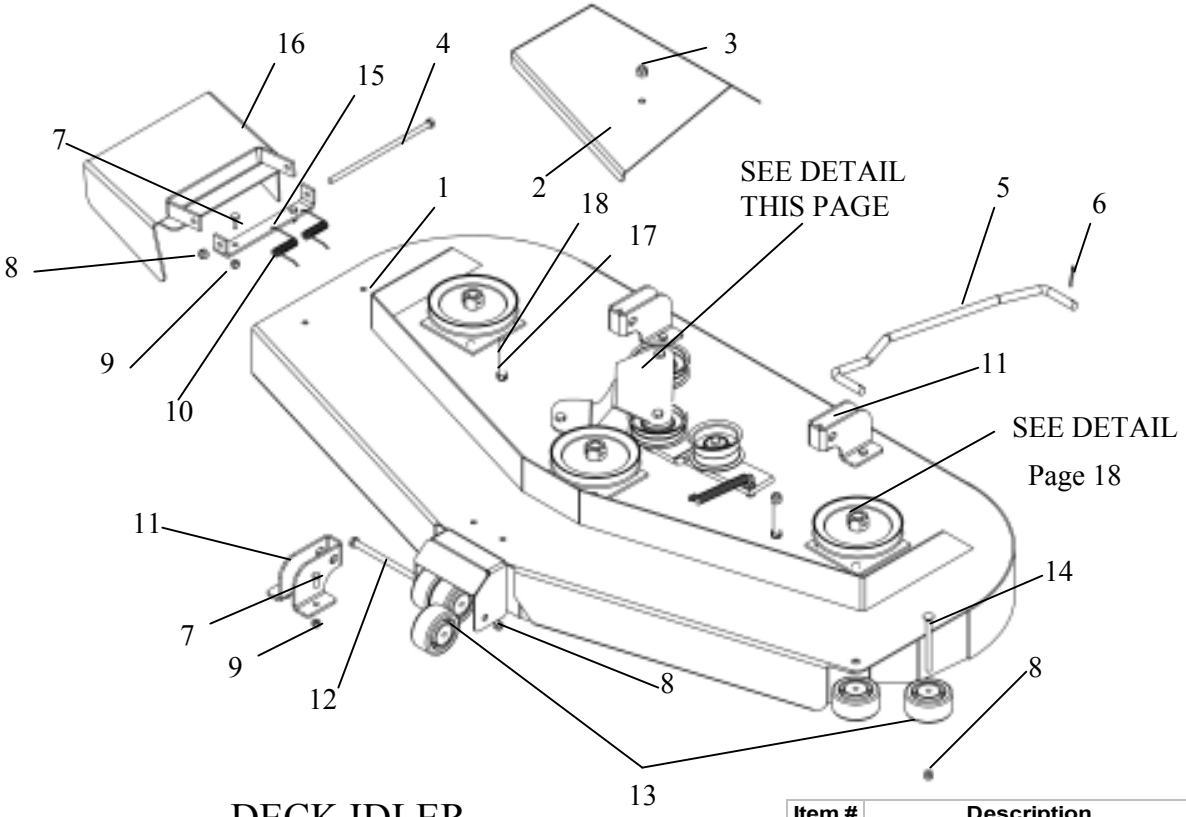
DESCRIPTION	PART #	QTY
5/16-18 X 3/4 Serr Flg Bolt	NB596	2
5/16-18 Serrated Flange Nut	NB170	2

DECK IDLER



Item #	Description	Part #
1	Deck Weldment	3762C
2	5/16-18 X 3/4 Serr Flg Bolt	NB596
3	Pulley Cover	3743
4	5/16-18 Serrated Flange Nut	NB170
5	Sway Bar Right	3664
	Sway Bar Left	3665
6	1/8 X 1 Cotter Pin	NB126
7	3/8-16 X 5 1/2 GR5 ZP	NB575
8	Anti-Scalp Roller	AS001
9	Seat Hinge	3808TK
10	5/16-18 Serrated Flange Nut	NB170
11	Lift Bracket	3738TK
12	5/16-18 X 3/4 Serr Flg Bolt	NB596
13	5/16-18 Eye Bolt	NB315
14	Grass Chute Weldement	3757TK
15	Grass Chute Mount	6030
16	5/16-18 X 8 1/2 HCC GR2 ZP	NB136
17	3/8-16 X 3 HTC GR5 ZP	NB164
18	3/8 SAE Washer	NB272
19	3/8-16 X 2 HCC GR5 ZP	NB198
20	Idler Pulley	7509
21	Front Roller Bracket Assy	4018TK
22	Idler Pulley	B527
23	3/8-16 2-Way Lock Nut	NB280
24	Deck Idler Weldement	3764TK
25	3/8-16 Nyloc Nut	NB182
26	Idler Bushing	6037

50” MOWING DECK



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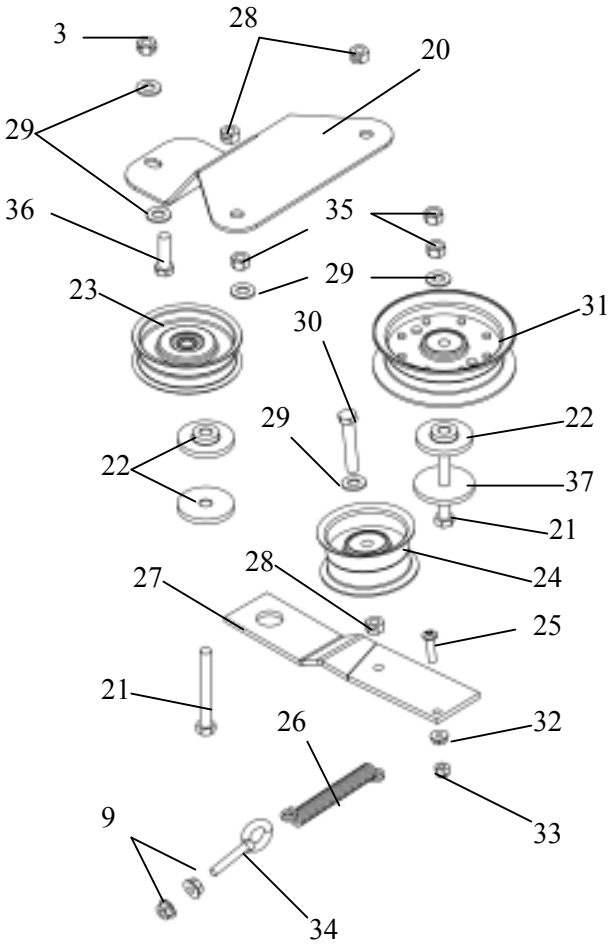
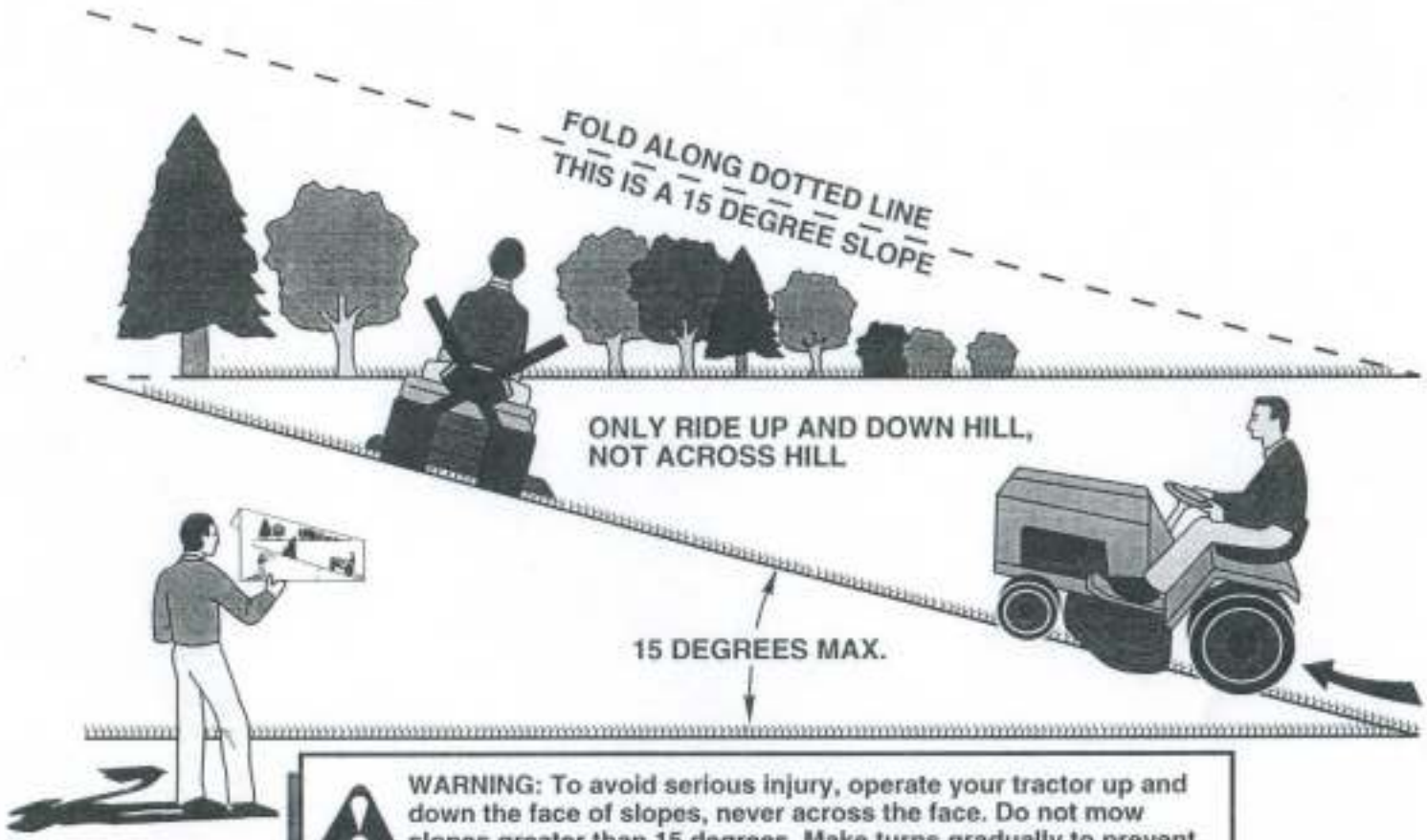


Item #	Description	Part #
1	50" ZTR Deck Weldement	3766C
2	Pulley Cover (Right Side)	3769TK
	Pulley Cover (Left Side)	3768TK
3	3/8-16 Nyloc Nut	NB182
4	5/16-18 X 8 1/2 HCC GR2 ZP	NB136
5	Sway Bar Right	3664
	Sway Bar Left	3665
6	1/8 X 1 Cotter Pin	NB126
7	5/16-18 X 3/4 Serr Flg Bolt	NB596
8	3/8-16 Nyloc Nut	NB182
9	5/16-18 Serrated Flange Nut	NB170
10	Grass Chute Spring	CH5S
11	Lift Bracket	3738TK
12	3/8-16 X 5 1/2 GR5 ZP	NB575
13	Anti-Scalp Roller	AS001
14	5/16-18 X 4 Carriage Bolt	NB101
15	Grass Chute Mount	6030TK
16	Grass Chute Weldement	3773TK
17	3/8-16 Kep Nut	NB205
18	3/8-16 X 3 HTC GR5 ZP	NB164
19	3/8-16 X 1 1/4 GR5 ZP	NB618
20	Pulley Brace	3772TK
21	3/8-16 X 3 HCC GR5 ZP	NB164
22	Idler Bushing	6037
23	Idler Pulley OD-3.25"	B527
24	Idler Pulley OD-2.75"	7509
25	1/4-20 X 1 Truss Head Screw	NB709
26	Spring	TZ2S
27	Deck Idler	3770TK
28	3/8-24 Two Way Locknut	NB280
29	3/8 SAE Washer	NB272
30	3/8-16 X 2 HCC GR5 ZP	NB198
31	Idler Pulley	3786
32	1/4-20 Flange Nut	NB524
33	1/4-20 Nylok Nut	NB180
34	5/16-18 Eye Bolt	NB315
35	3/8-16 HNCGR2 ZP	NB212
36	3/8-16 X 1 GR5 ZP Bolt	NB604
37	Idler Spacer	6040TK

TROUBLESHOOTING

SYMPTOM	CAUSE	CORRECTION
ENGINE HARD TO START	1. WEAK OR DEAD BATTERY 2. AIR FILTER DIRTY 3. BAD SPARK PLUG 4. FUEL FILTER DIRTY 5. STALE OR CONTAMINATED FUEL 6. CARBURATOR OUT OF ADJUSTMENT	1. REPLACE OR RECHARGE 2. CLEAN OR REPLACE 3. REPLACE SPARK PLUG 4. REPLACE FUEL FILTER 5. DRAIN AND REPLACE WITH FRESH FUEL 6. CONTACT NEAREST BRIGGS&STRATTON SERVICE REPRESENTATIVE
ENGINE WILL NOT START OR LOSS OF POWER	1. STEERING LEVERS NOT IN NEUTRAL LOCKED POSITION 2. PTO SWITCH IS ENGAGED 3. THROTTLE NOT SET PROPERLY OR NOT PROPERLY “CHOKED” 4. ENGINE FLOODED 5. DIRTY FUEL FILTER 6. DIRTY AIR FILTER 7. CONTAMINATED FUEL 8. BLOWN FUSE 9. BAD SPARK PLUG OR LOOSE PLUG WIRE 10. DIRTY ENGINE AIR SCREENS 11. WEAK OR DEAD BATTERY 12. CARBURATOR OUT OF ADJUSTMENT 13. OUT OF FUEL 14. CORRODED BATTERY TERMINALS 15. LOOSE OR DAMAGED WIRING 16. LOW OR DIRTY OIL 17. DEBRIS BUILT-UP UNDER DECK	1. MOVE LEVERS INTO POSITION. 2. PUSH PTO SWITCH IN. 3. SEE START UP IN OPERATION SECTION. 4. WAIT SEVERAL MINUTES BEFORE STARTING 5. REPLACE WITH NEW FILTER 6. REPLACE OR CLEAN 7. DRAIN AND REPLACE WITH FRESH FUEL 8. REPLACE FUSE 9. REPLACE PLUG AND TIGHTEN PLUG WIRE 10. CLEAN ENGINE AIR SCREENS 11. REPLACE OR RECHARGE 12. CONTACT NEAREST BRIGGS&STRATTON SERVICE REPRESENTATIVE 13. REPLACE WITH FRESH FUEL 14. CLEAN TERMINALS 15. CONTACT SWISHER SERVICE REPRESENTATIVE 16. CHECK LEVEL/CHANGE OIL 17. CLEAN UNDERSIDE OF MOWER
UNIT DOES NOT TRACK STRAIGHT	1. IMPROPER AIR PRESSURE 2. TRACKING ADJUSTMENTS OUT OF ADJUSTMENT	1. CHECK ANDADJUST TIRE PRESSURE 2. SEE TRACKING ADJUSTMENT IN SERVICE SECTION

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



WARNING: To avoid serious injury, operate your tractor up and down the face of slopes, never across the face. Do not mow slopes greater than 15 degrees. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

1. Fold this page along dotted line indicated above.
2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.
3. Sight across the fold in the direction of hill slope you want to measure.
4. Compare the angle of the fold with the slope of the hill.

181096 10.23.01
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OWNER'S MANUAL

MODEL NO.
ZT1436
ZT17542B
ZT1842
ZT20050

"Z" SERIES
ZERO TURN HYDROSTATIC DRIVE

Each mower has its own model number. Each engine has its own model number. The model number for the mower will be found under the seat. The model number for the engine will be found on the top of the blower fan housing.
All mower parts listed herein may be ordered directly from Swisher Mower & Machine Co. Inc. or your nearest Swisher dealer.
All engine parts may be ordered from the nearest dealer of the engine supplied with your mower.

WHEN ORDERING PARTS, PLEASE HAVE THE FOLLOWING INORMATION AVAILABLE:

* PRODUCT – Zero Turn Rider ("Z" Series)
* SERIAL NUMBER - _____
* MODEL NUMBER - _____
* ENGINE MODEL NUMBER - _____
  TYPE - _____
* PART NUMBER WITH PAINT CODE
* PART DESCRIPTION

TELEPHONE - 1-800-222-8183
FAX - 1-660-747-8650

SWISHER MOWER & MACHINE CO. INC.
1602 CORPORATE DRIVE
P.O. BOX 67
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